Name Date Score \_\_\_\_\_\_\_\_\_\_\_\_

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# Grade 7 Unit 3 Quiz 1: Ratios and Proportional Reasoning; Geometry

***A calculator may be used on this assessment***

**7.RP.3 (2 points)**

1. While doing research on a local river, Kristen put tags on 240 rockfish. Later, Kristen captured 38 rockfish, of which 6 had tags. What is the best estimate for the rockfish population in this local river? **Show your work.**

**7.RP.3 (2 points)**

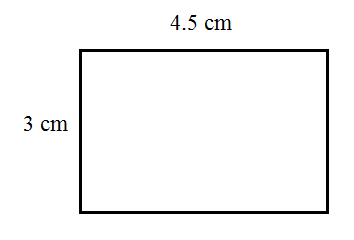
2. A clothing store purchased a dress for $80 and marked it up 150%. Stephanie makes a 14% commission on this sale. How much commission did she make when she sold this dress? **Show your work.**

**7.RP.3 (2 points)**

3. Mark has $360 in his savings account, and Trevor has $510 in his saving account. The interest rate is 3% and is not compounded. Using the formula *I = prt*, how much more money will Trevor have in his savings account at the end of 1 year than Mark? **Show your work.**

**7.G.1 (2 points)**

4. Look at the rectangle below.



If the rectangle is reduced by a scale factor of 0.75, draw the new rectangle next to the original rectangle. What is the perimeter of the new rectangle?

**7.G.2 (2 points)**

5. Draw an isosceles triangle with a 100° angle, labeling the lengths of the sides. Using a protractor, what are the measures of the other 2 angles?

**7.G.2 (2 points)**

6. Draw two different triangles with sides 3 cm and 4 cm.

**7th Grade Unit 3 Quiz 1 – Answer Key**

NOTE: Only one strategy is given to solve each problem, other methods may also be acceptable as long as they are mathematically correct.

1. 1,520 2 points

2. $28 2 points

3. $154.50 2 points

4. rectangle should be 3.375 cm by 2.25 cm; p=11.25 cm 2 points

5. make sure triangle is isosceles; angles should be 40 degrees 2 points

But accept measures close to 40 given this is not a construction

6. check sketches (one might be a right triangle) 2 points